Gallatin County Planning Board
Infrastructure Committee
Water and Wastewater Subcommittee
Record of Meeting: February 23, 2009

Members present: C.B. Dormire (Subcommittee Chair), Gail Richardson, Kerry White; Sean O'Callaghan, County Planning Department. Don Seifert- excused

1. **Call to Order.** 4:05

2. **Approval of January 12 & January 26, 2009 Minutes:** No comments offered.

3. **Conference call with Dave Aune about Great West 2007 Regional Wastewater Study**

Q: Why was no alternative presented in the report for serving Gallatin Gateway alone?

A: Alternative 10 (Figure 18) shows Gallatin Gateway alone and is described on page 59. This alternative assumed the treatment site would be located offsite to where land could be acquired. Page 1 – study purpose and study characteristics – explains this is a reconnaissance level study done with limited costs and attention in order to identify and focus on those options that are most viable. The next level of study would be a more detailed investigation.

Q: Alternative 7 that considers Gateway and Four Corners together – did it assume that the entire area would be served by Utility Solutions.

A: Utility Solutions wastewater treatment system appears to have capacity to serve the Gateway area, so that could certainly be a possibility.

Q: What do the numbers on page 50 represent?

A: They are the population projections within the two block groups – servicing the land within those boundary areas.

Comment from Dave regarding the general structure of the Study: If you look at "Triangle Area", the identified alternatives start with the more complex options and then delve into simplified solutions.

Q: Alternative 6 – capacity of 1.7 mgd –where did that number come from?

A: The projections and assumptions are explained starting on pg 1. Data from Belgrade and Bozeman was combined with the census tract data, and was further refined to the census block level, then "study area zones" were created within which population estimates were calculated and then projected into the future.

Q: At what point in time are we anticipated to reach that 1.7 mgd?

A: 2025

Q: Page *v* – regional collection system requirements between 150 – 200 miles pipe, what scale did that consider?

A: Where existing subdivisions exist, they drew a line through the subdivision, where subdivisions didn't exist, they guessed what they may look like in order to make an estimate. They made a map of this and Dave suggested looking at the handouts from when the study was presented to the Planning Board. He said he could get us another copy of that map if necessary.

Q: Did you use gross density (so many houses per 100 acres) or a net density?

A: Neither – used historical and projected populations to identify future urban and suburban areas and then determined the amount of land within each classification of density. Figure 5 shows a more compact future development pattern that Figure 6. Page 13 – study would have to approach a total population of 250,000 to provide cost effective regional wastewater collection. Not ready for one large system, rather we need to build systems to serve the current population centers, at least over the term of the next 20 years or so.

Q: Why no separate Four Corners option, is this because of Utility Solutions?

A: Dave said that if that was not analyzed, it seems like it should have been. At the reconnaissance level, Alternative 7 could be reviewed and the information about Gateway could be removed. An alternative that separates Gateway and Four Corners could be analyzed in greater detail in the next level of study. The approach taken in such an option should be considered conservative because it may be able to be served in a cheaper manner through Utility Solutions. Looks like Gateway could be served in Four Corners by gravity feed, but limited ability to serve east and west of main line without lift stations.

Q: Did cost estimates include right-of-way acquisition?

A: Yes, the unit costs reflected a whole range of things including right-of-way.

Q: Did the cost estimates account for different pipe size?

A: Yes, they tried to break it down according to different sized pipes. Dave had this breakdown on a map and is going to try and get that to us.

Q: Alternative 7 suggests that either discharge to the West Gallatin River or to groundwater is feasible. Was this considering Utility Solutions?

A: No it wasn't – there are a whole range of political/policy decisions that factor into whether or not to count on a private utility provider to provide this service for the area, but he found nothing to suggest that they could not provide that service (pg 50). The numbers presented represent a separate system and generally include those folks that are now served by Utility Solutions (not Black Bull, not Gallatin Heights, etc.).

Q: Alternatives (Figure 9) that locate plants next to rivers – was this assuming river discharge?

A: Different streams have different regulatory levels for discharge. As wastewater flows go up, he dismissed surface water discharge as an option, but may be an option for the smaller systems.

Q: What about areas with high groundwater?

A: The central systems have to treat to a much higher level than existing septic systems that are discharging to the same resource. The effluent is also monitored and regulated.

Q: Page *vi* - #3 – Was this evaluated further?

A: No, building on conclusions – implementation recommendations – Pg. *vii*. Alternative 5 and Alternative 7 appear to be the most viable solutions. If Belgrade doesn't come on board either, Alternatives 8 & 9 become most practicable.

Q: Page 10 – address the importance of the density and distribution projections and the consequences of material variations from those used in the projections?

A: Population projections were done in a pretty traditional manner, and there is a reasonable degree of confidence in the numbers. Projections tend to overestimate population growth. Dave has less confidence in the population distribution, but has a lot of confidence in the methodologies, they even talked to some of the big developers. He hopes that is what we achieve in terms of distribution. The more sprawl, the higher the collection cost – spatial distribution of development doesn't impact treatment cost.

Q: What does he see as the population density at which central systems become viable?

A: It gets tough if it is below three persons per acre – which equates to approximately one home per acre. There is a difference between density of development and the concentration of development (i.e.; a five lot subidivision all on septics vs. 900 homes on septics.)

Q: Is it reasonable/feasible to require a developer to design a system so it can be hooked up to a regional system in the future?

A: Yes, assume a subdivision that treats to a level 2 community drainfield. The collection system is established by the developer and in place, which is one of the most expensive parts of a future hookup. Trunk lines and interceptors can be connected later in a fairly straightforward fashion.

4. Member Reports:

Gail would like to have Gretchen Rupp from the Board of Health look over the Subcommittee's proposal and provide comments before the study goes out for a RFP. Gretchen is an engineer but works at MSU, so there should not be a conflict. Gail discussed two documents from the Board of Health: Wastewater Committee Initiatives (1/27/2009); Public System Regulation & Oversight Meeting (9/24/2008). Kerry mentioned that the initiatives seemed to be dealing with things in a piecemeal approach rather than a comprehensive approach.

C.B. has met with Alan English, and they are making progress on putting together their report.

Kerry has not had the opportunity to talk to the Commission about the proposed scope of work and study area, but has delivered those items to the Commission's office.

5. Next meeting Date and Agenda: March 9th –, recap/further discussion regarding conference call with Dave Aune, Member Reports, Greenbaum's Memo

6. Other Business: None discussed.

7. Adjourn: 5:58 p.m.